Solicitation Number: SCC060001-A1

# Statewide Research and Survey Services

# **Category 3.1.2. Market Research**

Solicitation Due Date: September 30, 2005

Submitted to: Strategic Contracting Centers 100 N. 15<sup>th</sup> Ave., Suite 104 Phoenix, Arizona 85007



Submitted by: LeCroy & Milligan Associates, Inc. 620 N. Country Club, Suite B Tucson, AZ 85716 (520) 326-5154 FAX (520) 326-5155 http://www.lecroymilligan.com

## **Experience and Expertise—-Market Research 3.1.2**

#### **Overview of Experience and Expertise**

LeCroy & Milligan Associates, Inc. (LMA) has the breadth of experience and a service philosophy that is well suited to the variety of services requested in the solicitation. For the past 14 years, LeCroy & Milligan Associates has provided research, evaluation, planning and training services for state, federal and local agencies in a variety of project areas.

The combined personnel of our organization provide a unique balance of individuals that have the analytical, statistical, and substantive expertise to respond to the demands of the RFP and produce exceptional consultation and project services. Project teams are formed to include staff members whose unique experience is most needed by a particular project.

Our staff comprise a multi-disciplinary team with professional backgrounds in psychology, social work, public health, juvenile justice, education, public administration, family studies, and management information systems. Our staff's backgrounds include *direct* program development and administrative experience as well as *consultation* in research. This experience enables us to understand the *practical and practice* issues involved in human services. Also, our work is not dependent on one person but rather involves an entire team to provide the service or product. This provides clients with additional assurance that our work will be completed in a timely and efficient manner.

We have a staff of 21 full-time and 2 part-time employees that work efficiently and effectively in designing and carrying out research, planning, and consultation projects. Because we use a team approach in our work, the burden does not fall exclusively on one evaluator to complete work, and thus we can be efficient and timely in our work. Our team includes:

- 1 President/Evaluator, MSSW
- 1 Executive Director/Evaluator, PhD
- 5 Evaluation Associates, Master's Degrees and PhDs
- 3 Evaluation Specialists, BA
- 1 Computer Systems Manager, BS
- 1 Business/Operations Manager
- 3 Data Entry Specialists
- 7 Quality Assurance & Training Team Members, 3 Master's Degrees

LeCroy & Milligan Associates maintains a well-established office in Tucson, Arizona. The offices are connected with a local area computer network with state-of-the-art word processing equipment, and use Microsoft products, SPSS, Epi-Info, ArcView GIS mapping software, and Dreamweaver software. We also have access to large mainframe computers when needed. Our computer and personnel capacity and experience allows us to process and enter large data sets if needed. Our office has a conference room available for meeting and training when needed. We have a large library of evaluation, prevention and training materials. We have two fax machines to receive documentation and we are available by phone, fax, or email.

Our staff have access to numerous on-line and library resources for reference needs. We have DSL Internet connections with virus and security protection updated regularly. We maintain three websites and regularly post reports, written materials, training materials, and relevant links. We have developed a web platform for training modules used nationally. We use Dreamweaver software for creating secure web-based access for online data collection.

#### **Experience and expertise in Market Research**

LeCroy & Milligan Associates has strong experience in developing and conducting survey research and studies examining opinions, trends and needs among various population groups. Some projects are highlighted below.

Nevada "Real Choices" Needs Assessment of Children with Special Health Care Needs (CSHCN). In this 2004 study LMA conducted several surveys and studies, including:

- On-line and paper surveys of Nevada's medical providers to provide information on their perception of CSHCN and their families
- Surveys and focus groups with parents regarding their perceptions about availability and accessibility of services, most valued resources, barriers to services, and suggestions for improvement in services
- inventories of all currently available government agency resources for CSHCN throughout Nevada among state, county, and municipal service providers (including financial assistance programs, developmental services, direct services, and educational services)
- inventories of private and nonprofit community resources, activities, and services, all mental health providers, all advocacy groups available in each geographic area of the State by county
- an inventory of service gaps, including transportation in each geographic area
- *surveys of provider availability* in each geographic area (general medical, medical specialty, and physical/speech/occupational therapists) by county
- *socioeconomic breakdown of CSHCN* and their families and a quantitative description charting and/or graphing their geographical location within the state.

**Key Staff:** Allison Titcomb, Pat Canterbury, April Hizny, Kerry Milligan

<u>Pima County Juvenile Probation evaluation</u>. This one-year study completed in 2003, was a multi-method study examining the effectiveness of Juvenile Probation services. It included three large-scale telephone surveys with victims, family members and the general public regarding perceptions of the department's effectiveness, a comprehensive literature review of juvenile treatment approaches, a single system design study with probation officers, and a recidivism study requiring mining of the JOLTS (Juvenile On-Line Tracking System).

**Key Staff:** Craig LeCroy, subcontractor Dennis Palumbo, Ph.D. and FMR Associates, Inc.

Arizona Department of Health Services Abstinence Only Program Evaluation (1998-2003)--In this 5-year evaluation, we implemented a process and outcome study of the statewide Abstinence Only Education Program. One component of this project was a stratified random sample

telephone survey of the general public's perceptions of the Abstinence Only media messages that were broadcast over the five years. The media survey was implemented for four program years to approximately 900 respondents. Other components of this project included survey data collection in over 170 schools throughout Arizona, administering written surveys to over 100,000 youth and adult participants. Our strategy that enabled this broad saturation was to train program staff in data collection through on-site training, a comprehensive data collection manual, and monthly follow-up and technical assistance. Paper and pencil survey was the only feasible method due to the variety of settings, times and formats of the prevention programming. The primary outcome survey for adolescents had over 100 items related to risk and protective behaviors related with the strongest emphasis on sexual behaviors and intentions. Surveys were carefully reviewed for language, age and cultural appropriateness. We attained an excellent response rate with highly reliable data. We also developed surveys for adult participants, parents, and key stakeholders regarding perceptions of the program. Because of the sensitive nature of this content area, this project provided extensive experience in working effectively with communities around Arizona.

**Key Staff:** Pat Canterbury, Olga Valenzuela, April Hizny, Cindy Jones, Kerry Milligan, and subcontractors Judy Krysik, Ph.D., Jen McGuire, Ph.D., and FMR Associates, Inc.

OASIS Center for Sexual Assault and Relationship Violence program evaluation (University of Arizona) (2002-03). During this two-year project we developed and conducted focus groups and key informant interviews to survey and assess the needs and perceptions of the Center among "consumers" and community collaborators.

Key Staff: Allison Titcomb, Kerry Milligan

Maternal Health Report: Analysis of Focus Groups Among Women Who Received Inadequate Prenatal Care. (2001) This project was designed for the Pima County Health Department to investigate why some women fail to use adequate prenatal care. We designed focus group discussion guides for use with both consumers and service providers to explore the reasoning behind their prenatal health decision-making and how services were accessed.

**Key Staff**: Kerry Milligan, Craig LeCroy

Two other Pima County projects involved researching the needs of particular population groups, namely homeless youth in Tucson. Project Contact: Access to a Pediatric Home for the Homeless Focus Group Study (2002) included focus groups as the main source of data collection to gather information about health care needs from homeless youth. In 2004-2005, we conducted a project for the Tucson Planning Council for the Homeless, with focus groups, surveys and key informant interviews with homeless youth and providers regarding their understanding of and access to a variety of community services.

**Key Staff:** Hilary Smith, Craig LeCroy

#### References

#### 1) Client Organization/Contact person

Arizona Department of Health Services Sara Rumann, Program Manager (602) 364-1400

Proposal for Statewide Research and Survey Services LeCroy & Milligan Associates, Inc. 3.1.2. Market Research **Project Description/Project Dates:** *Arizona's Abstinence Only Program evaluation* was a program evaluation of abstinence only education involving 18 sites, 172 schools, 600 locations, surveys of 100,000 participants on sexual risk and protective factors, four annual telephone media surveys, and provider and stakeholder surveys.

**Project Dates:** 1998-2003, 2004 -present

# 2) Client Organization/Contact person

# **Nevada Department of Health Services**

Debra Wagler, Health Program Manager Real Choices System Change program Bureau of Family Health Services 3427 Goni Road, Suite 108

Carson City, NV 89706 Phone: 775-684-3479 **Project Description** 

Nevada Needs Assessment of Children with Special Health Care Needs. A statewide needs assessment regarding availability and accessibility of community based services for children and their families.

Project Dates: August 2004-June 2005

### 3) Client Organization/Contact person

Pima County Juvenile Probation Department

Karen Godzyk

Phone: (520) 740-2094

**Project Description:** *Pima County Juvenile Probation evaluation.* A multi-method study which included three large-scale telephone surveys with victims, family members and the general public regarding perceptions of the department's effectiveness, a comprehensive literature review of juvenile treatment approaches, a single system design study with probation officers, and a recidivism study requiring mining of the JOLTS (juvenile on-line tracking system).

Project Dates: June 2002- June 2003

#### 4) Client Organization/Contact person

Tomas' Leon, Executive Director

Youth on Their Own Tucson, Arizona Phone: 520-293-1136

**Project Description:** *Homeless youth survey* for the Tucson Planning Council for the Homeless. Surveys, focus groups, interviews to assess needs of homeless youth and

conduct strategic planning.

**Project Dates**: September 2004-present

#### **Resumes of key personnel**

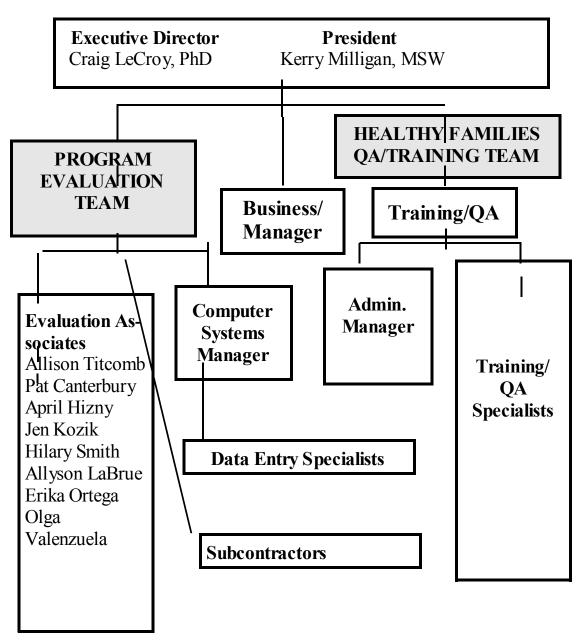
Resumes of the following key LeCroy & Milligan Associates staff are attached.

Kerry Milligan, MSSW Craig LeCroy, Ph.D. Allison Titcomb, Ph.D. Pat Canterbury, MPH April Hizny. BA Jen Kozik, MPH Hilary Smith, MA Cindy Jones BA, MIS Allyson LaBrue. BA Erika Ortega, BA Olga Valenzuela. BA

#### Potential Subcontractors:

- FMR Associates, Inc. Tucson, Arizona. Founded in 1981, FMR Associates, Inc. specializes in strategic research for the communications industry. We have used them for random-digit dial telephone surveys.
- Judy Krysik, Ph.D.

# LeCroy & Milligan Associates, Inc. ORGANIZATIONAL CHART



Note: The Project team leader is chosen from evaluators for each project, and supervises the project.

# Method of Approach—3.1.2. Market Research

#### Research Plan

Each project begins with the development of a research plan that outlines the study questions, key variables, and data sources. Once the research plan has been developed, LeCroy & Milligan Associates creates a work plan that includes a detailed master schedule of activities and timeline for the study. A project manager is assigned to the study and is responsible for adhering to this plan, which includes the data collection and data quality assurance activities, data analysis, and report writing. Appropriate staff are assigned to each of these activities.

#### Selecting and implementing appropriate data analysis methods

Part of the research plan includes a data analysis plan that details the steps and methods for analyzing the data. During the early stages of project planning, and periodically during the course of a project, the project manager facilitates a team meeting with the entire evaluation staff, to gain input and expertise on appropriate data analysis methods. Different evaluators have different areas of expertise that inform the methods chosen; in addition, we may utilize a methodological expert from the academic community for consultation on projects if needed. The selection of these methods depends on the following:

The needs of the client (primary research questions and type of information needed)
The type of the data collected (e.g. qualitative vs. quantitative, secondary source data or
survey data),
The sample size
Project timeline.

*Qualitative Data Analysis*. If the data collected is primarily qualitative, e.g. open-ended survey questions, then content analysis may be used to organize the data around the major questions or themes in the narrative, or text under analysis.

We have several staff with experience in qualitative data analysis. The needs of the client drive the type of information that is provided through the qualitative analysis: raw data, description, interpretation, recommendations based on the data or a combination of all these things.

Quantitative Data Analysis. The quantitative data analysis is driven by the research and hypotheses from the research plan. We have a professional staff that are trained in a variety of descriptive and multi-variate inferential statistical techniques. While our staff has the ability to perform sophisticated analyses we only use the level that is most appropriate and necessary for the project. Another consideration is the type of data available for analysis. Sometimes, the data may be nominal or discrete, and do not lend themselves to sophisticated techniques. For most survey data, the descriptive techniques usually include frequency distributions, percentages, and central tendency statistics are used, for example, to describe the population characteristics, opinions, perceptions, behaviors, attitudes and knowledge.

Secondary source data and data mining. For many projects secondary source data exists as a rich resource for data mining for health data. Our knowledge of secondary data sources relevant to state agency program and policy areas has grown over the years from our past work with the Governor's offices (formerly, the Divisions of Drug Policy and Prevention of Family Violence), from our extensive work with state agencies (Department of Economic Security, Department of Health Services, the Administrative Office of the Courts), the Regional Behavioral Health Authorities, and local community based organizations in every county in the state. In terms of large data sources, we have worked with or are familiar with many sources, including Vital stats, CHILDS, JOLTS, US Census data, Arizona Youth Survey data, Department of Education school data, Centers for Disease Control (CDC) data, data out of the Institute for Social Research (University of Michigan), and many others. LMA has the technology and staff MIS support to merge datasets for analysis. For example, we have utilized JOLTS to examine recidivism for several projects, mined CHILDS data to examine child abuse and neglect rates, examined Vital Records for teen pregnancy rates, and so on.

For data analysis, at a minimum the following steps are typically conducted by LeCroy & Milligan Associates:

- 1) Clean the data (check for missing data and accuracies)
- 2) Determine the data distributions of the major variables for the analysis (i.e. frequency distributions, histograms, central tendencies, skewness, etc.)
- 3) Based on the results from previous steps, adjust the analytic plan so the analysis is appropriate to the data.
- 4) Create syntax for re-coding of variables if needed, for example to aggregate data, or re-code variables to address uneven distributions, etc.
- 5) If scales are used, calculated scale scores and determine scale reliability, and conduct item analysis to assess empirical validity.
- 6) Conduct major analyses based on type of data, for example, correlational or inferential statistics.

In our Statewide Needs Assessment of Children with Special Health Care Needs (CSHCN) for the state of Nevada (2004), we gathered data about governmental agency resources through a combination of Nevada state agency resource lists, internet searches, phone surveys and document review. A matrix database of services will be created that can list resources by type of agency, targeted clients, region served, type of service, and eligibility/accessibility policies. The comprehensive list includes such resources as regional and neighborhood health centers, children's hospitals, university programs and services, local health departments, school medical services, DSHS Disability Determination, development disability services, vocational rehabilitation services, Early Hearing Detection & Intervention, Program for Infants & Toddlers with Disabilities, Nevada Check-Up, Preschool Grants Program for Individuals with Disabilities. This type of information is important to collect and analyze by the geographic areas in order to assess the extent to which commonly sited barriers for CSHCN healthcare, e.g., inadequate regional availability of hospital care exist in Nevada. This project will support the Nevada Department of Health Services in their Real Choices healthcare system strategic planning.

#### Survey planning and design

LeCroy & Milligan Associates (LMA) has developed, conducted and analyzed numerous consumer and provider surveys to gather information from different populations. LMA determines the variables of interest in the survey project through a comprehensive team approach, which includes the stakeholders' input and feedback. We work to identify the stakeholders' most important variables of interest, because they will be the focus for measurement. Inevitably, there are limited resources for survey work. A key to an efficient survey research project is to focus on the most important variables to measure, and to measure them well.

LeCroy & Milligan Associates develops and administers surveys in a variety of methods, including phone, on-line or web-based, mail, paper and pencil, focus groups or face-to-face interviews. Surveys may be used to gather information about behaviors, attitudes, or knowledge that is then used for needs assessment, program development, evaluation, and/or to obtain reactions to services and products. LMA will use a systematic process to design, develop and execute the survey research tools and instruments with the objectives of maximizing survey validity and reliability. **The proposed steps in this process include**:

- 1. The selection of a team of LeCroy & Milligan personnel and/or potential subcontractors based on specific survey research expertise (e.g., experience with the target group, survey design expertise, sampling design, formatting specialists, data analysis).
- 2. The designated lead evaluator will coordinate an organizational meeting with the client to exchange ideas about the project needs, methods and instruments. The initial steps of survey design include a careful examination of the goals and objectives and underlying logic of the project, and a literature review to help define the "state of the art" methods for measuring the issues or concepts of interest. In addition we gather existing instruments that may be designed to measure the areas of interest and determine if items may be adopted with permissions or adapted in the new survey instruments. We also attempt to review currently existing data sources to avoid duplication of effort and to build on existing knowledge. For example, in Arizona and nationally, there have been several surveys of substance abuse and other risk behaviors among youth, and our review of those efforts helped to inform the survey design in the Abstinence Only program evaluation we conducted for the Department of Health Services (1998-2003).
- 3. The LMA team would then adapt or create the survey questionnaires or instruments. The instruments would be translated into Spanish or other languages if needed.
- 4. The LMA team would pretest and further revise the questionnaire based on feedback. If time and resources allow, one method we have found useful in pilot-testing an instrument is the method of cognitive interviewing (Fowler, 1995). Basically, cognitive interviewing involves asking selected individuals the survey questions, then probing with follow-up questions to learn how individuals understand the question, and what their answers mean to them. In pretesting the instrument, we attempt to get a representative sample of the target group in terms of geographic centers, age, ethnicity, gender, etc. Depending on the target group characteristics, a small monetary incentive might be provided to each participant. The survey participants are asked to think aloud as they formulate their responses to the survey questions. Comments from the participants completing the pretest will be recorded. Particular attention would be given to individual's response to the language of the survey (questions and response categories), time to complete the

questionnaire, and ease of completion. The pretest process will also allow pretesting the instructions for completion. After completion of the questionnaire, the participants might be asked questions in a group format, including their sincerity in answering the questions, suggestions for alternative wording, etc. The survey questions will be revised based on the pretest results. LeCroy & Milligan Associates will prepare a fully refined version of the survey, including instructions for administration. The revisions must be made keeping in mind the objectives of decreasing response error and increasing respondent motivation.

- 5. Final input on the draft survey questionnaire and administration protocol would be sought from client, revisions on English and Spanish (or other languages if needed) versions will be made accordingly.
- 6. Once the final survey is completed, the format would be executed, for example, hard copy survey, scannable test booklets, phone interview guide, on-line survey, or email survey.
- 7. Prior to administration (phone, online, mail), quality assurance processes to insure data integrity would include data collection protocol manuals, training data collection staff, outlining the data tracking and monitoring systems and data cleaning procedures.
- 8. Depending on the size of the project, shortly after data collection begins we conduct quality checks on the integrity of the data gathered.
- 9. Analyze the data
- 10. Share and use the results

For each project, we select a team of at least two LeCroy & Milligan Associates staff to coordinate the research project, design a data collection and data analysis plan. The project manager will then tap our other staff as needed for selected tasks; for example, our Evaluation Assistant may complete a series of phone interviews, or site visits to collect survey data. A senior evaluator may be tapped to complete some complex data analysis if needed, and our Computer Systems Manager, skilled in data base development, may be tapped to create databases, manipulate data sets and so on. If needed, we would subcontract some telephone surveying to FMR Associates, Inc.

#### Samples

Often in market research the development and application of the sample design are essential to ensure that the data are collected accurately. LMA proposes to use the experience of their inhouse team of research specialists, informed by the expertise of a statistical sampling expert if needed.

Sampling of survey participants depends on the scope and research questions for the survey project. LMA can use sampling techniques for estimating and obtaining adequate representation of the population that is necessary for detecting significant differences among the outcomes of interest. Our staff have expertise in conducting power analysis for estimating the sample size needed for various types of survey study designs.

When determining samples, LMA also considers the demographics of the target population and prevalence rates for the social or health problem that the program is trying to address. For example, over-sampling of certain groups may be employed in order to adequately represent a Proposal for Statewide Research and Survey Services

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small but crucial group that is targeted for the program, such as high-risk populations, or ethnic groups that are vulnerable to a particular social problem.

Some of the types of sampling we have conducted include multistage probability sampling, purposive sampling, computer generated randomly drawn samples, and cluster sampling. The details of the sample design include definition of the population, identification of subpopulations and detailed sampling procedures. Selection of the sample would be drafted and revised in consultation with the client.

#### Using Geographic and Demographic data in market research

LeCroy & Milligan Associates has designed and implemented survey research with diverse populations and for a variety of different situations. For example, surveys have been designed for juvenile court judges, service recipients, welfare workers, parole staff, and many other groups. We have translated almost all of our surveys into Spanish and incorporate pre-testing, feedback and revision to insure appropriate language for local populations. Our surveys have been used in very focused, single site research projects as well in broader, multi-site evaluations. The Juvenile/Family Drug Court evaluation surveyed Judges, probation officers, drug court staff, and the juveniles and their families in sites across the state. We also developed surveys in evaluating the Drugfree Workplace program for the Governor's Community Policy Office from 2000-2003. These surveys were designed to gather outcome information from parents attending substance abuse prevention programs in workplaces. For the Abstinence Only program evaluation, statewide surveys were designed and administered during the past six years with adolescents, school principals, and program staff. Surveys developed for the Pima County Juvenile Probation Services evaluation investigated perceptions and experiences of victims, families and the public related to juvenile offenders.

Several of our projects have included specific components to gather health related information for identified communities. After meeting with the client and a cross section of community stakeholders, the study plan is drafted and reviewed. As described in the section above, we use a step-by-step approach to designing and implementing the survey or study. For example in our 2002 needs assessment survey of the Three Points, Arizona community, the community substance abuse advisory board was interested in learning about the health and well-being of children during after -school hours and problems experienced by families in that area. After specific research questions were generated, a survey was designed and implemented to gather information about this specific geographic area. We also examined secondary source data from the juvenile probation department regarding risk behaviors of youth in this area. The results were analyzed and reported to the advisory board that then used this information to develop grants and action plans for after-school prevention programs.

For many projects demographic data can be collected, compiled and analyzed by geographic area. Using software such as ArcView or Excel, the data can be represented in graphical form with maps or charts, depending on the clarity of the method for communicating the pattern of the socioeconomic variables to be displayed. For example, if there are large differences by county or by region within a county, a map could effectively "tell" that story. If the socioeconomic

breakdown is more complicated and related to variables other than geography (e.g., presence of specific advocacy groups), then charting by variable category may be more appropriate.

Socioeconomic breakdowns have been reported in a number of evaluation reports completed by LeCroy & Milligan Associates. Each of our contracts with the Arizona Department of Economic Security (e.g., statewide assessments of such programs as Health Families, Family Builders, Family Group Decision Making, Family Preservation/Family Support) have included details about household income, poverty rates, employment and education, and family composition. The ability to assess these indicators will depend on available data from state agencies and the ability to survey families who currently receive services.

## Prepare reports, and make recommendations

LeCroy & Milligan Associates' general approach to report writing is to understand and respond to the information needs of the audience for the report. This will determine the scope and format of the report. We have written reports that vary in their technical nature, and sometimes, we produce several reports for one project that address different audiences. For example, we may write a comprehensive main report, and then we may produce a short report or executive report for policy-makers and the public. In other cases, we have written both a technical report, which specifically details the analytic results, and a report for lay audiences that only summarizes and interprets the findings. Our report formats are usually provided in both print and electronic versions.

In general, our reports typically include all of the following components:

a description of the methodology used in the project
a description of the limitations and challenges of the study and research design
how we constructed the sample and demographic characteristics of the sample
the major questions or hypotheses for the study
the statistical analysis approach and results, including confidence intervals
the major findings
recommendations for the program or project.

Reports, data summaries and other documents are prepared by the lead researcher and go through an extensive review process by other evaluators and the company principals.

#### Findings and Recommendations

Another important task is developing findings and recommendations that are reflective of the data collected are based in sound research, and that are actionable, achievable, and relevant. LeCroy & Milligan Associates adheres to the ethical principles developed by the American Evaluation Association and maintains membership and active involvement with the organization. LeCroy & Milligan Associates firmly believes that the goal of any research or evaluation project is improvement of services and, subsequently, enhanced quality of life for those the agencies serve. To do this, the findings and recommendations must:

- Be directly linked to the objectives of the overall project and clearly linked to the data collected as part of the project;
- Be derived from the best existing science associated with the subject area;
- Based on actions that if implemented will lead to identified improvements or changes;
- Be within the reach of the agency in terms of available resources; and
- Be relevant to the changing needs and priorities of the organization.

#### **Background Information/Work Samples**

Examples of reports and projects can be found on our website, <u>www.lecroymilligan.com</u>, for example:

- Nevada Needs Assessment of Children with Special Health Care Needs—final report
- Executive Summary of the Pima County Juvenile Probation evaluation, 2003
- Arizona's Abstinence Only Program evaluation—Annual reports and executive summaries